

florescence, pedicels and follicles, although ordinarily well marked, show such transitions as to indicate that *S. rosea* is an extreme variety of *S. tomentosa* rather than a distinct species. It should be called

SPIRAEA TOMENTOSA L., var. **rosea** (Raf.) n. comb. *S. tomentosa* L. Sp. Pl. 489 (1753) as to the Plukenet plate. *S. rosea* Raf. N. Fl. iii. 62 (1836).—The following specimens are characteristic. WEST VIRGINIA: Elkins, Randolph Co., *Greenman*, no. 188. NORTH CAROLINA: Biltmore, *Biltmore Herb.* no. 1247b. SOUTH CAROLINA: definite station not given, *M. A. Curtiss*. WISCONSIN: Milwaukee, *Lapham*, Polk Co., *C. F. Baker*; Camp Douglas, *E. A. Mearns*, no. 336. MINNESOTA: St. Paul, *Hale*; Chicayo Co., *B. C. Taylor*.

GRAY HERBARIUM.

SISYMBRIUM OFFICINALE IN THREE STATES.

SIDNEY F. BLAKE.

My first meeting with the typical form of *Sisymbrium officinale* (L.) Scopoli was on 13 July, 1910, when I collected three plants (sheet 1295, my herb.) along a railroad at St. Paul, Minnesota. Not recognizing its identity at the time, I failed to note whether other individuals of the species were present. So far as I am aware, the typical form has not been reported from the state since the difference between our two forms was first pointed out by Dr. Robinson some years ago.

Since that time I have twice collected the plant in Stoughton, Massachusetts. On 4 July, 1911, a single plant, growing with many of var. *leiocarpum* DC., was collected on a dump (sheet 2823). On 13 July, 1912, just two years after my first meeting with the species, four specimens were taken, found, together with many glabrous-fruited ones, in dry soil in a house-yard, perhaps a mile from the dump at which it had previously been taken.

On 27 July, 1911, Mrs. N. F. Flynn showed me at Starr Farm, Burlington, Vermont, a colony of Hedge Mustard in which she had noticed three days before a plant or two with pubescent pods. Going over the colony more carefully, we counted some forty-eight plants of

true *S. officinale*, which according to my notes "far outnumbered the variety *leiocarpum* which was also present." A number of plants were collected. This occurrence, the first indubitable one for the state, led me to watch for the plant thereafter, and I was rewarded by two more "finds," though of very small colonies. On 30 July, in a pasture in Shelburne, not far from Shelburne Pond, I found and collected three plants of the type. I do not recall that any individuals of the variety were present. On 2 August a solitary plant (sheet 3580) was taken in a field near a farmhouse in Colchester, near Barney Point. All these Vermont records have been briefly published by Mrs. Flynn in Bull. 7, Vermont Botanical Club, p. 16, 17 (May, 1912).

In a comparison of the twenty-six plants of *Sisymbrium officinale* now in my possession with a number of specimens, mostly freshly picked, of var. *leiocarpum*, other differences than the pod-character have appeared. In the first place, in *S. officinale* the pedicels and axis of the main spike-like inflorescence, as well as of the usually horizontal lateral branches (which in both forms so generally come off at or above the middle of the stem, except in case of an injury to the main axis lower down,—in which event several ascending branches develop from the upper leaf axils, much as in *Lactuca* under similar conditions,—that one of the St. Paul specimens, only 25 cm. high, with four well developed branches in its first five cm. of height, seems worthy of notice on this account) are more or less densely pubescent with the same short spreading hairs as are the pods. In var. *leiocarpum* the pedicels, like the pods, are glabrous, while the flowering axes are glabrous except for a few scattered enlarged retrorse hairs with swollen usually purplish bases, reminding one of miniature *Rubus* prickles (which also occur in the type, among the much more numerous smaller hairs). Similar hairs occur on the main stem in both forms, but in true *S. officinale* they are again intermixed with smaller hairs, far outnumbering them, similar to those on the pods.

A few further differentiae of more doubtful import may be mentioned. The runcinate lower leaves of both forms are indistinguishable, but in *S. officinale* the hastately three-lobed, or even unlobed and linear-lanceolate, leaves of the flowering parts are appressed-pubescent, sometimes densely so, above and beneath, whereas the variety has these leaves glabrous or with a few hairs on the lower surface, rarely on the upper. Again, none of the *S. officinale* has the purple of the stem so extensive as it very often is in the variety, the

color being present only at its base, although in this respect the plants do not differ from some specimens of the variety. Finally, *S. officinale* seems, so far as my experience goes, to be the smaller plant of the two; my tallest individual is only about 50 cm. high, while the variety is almost always taller than this. Whether this character would hold in a larger series of specimens I am not able to say.

STOUGHTON, MASSACHUSETTS.

A PURPLE-FRUITED ASH.— In June, 1911, Mrs. H. K. Morrell sent from Gardiner, Maine, a branch of *Fraxinus americana* L. with deep reddish-purple fruit with a query as to its identity and the remark that “ours about the house have green wings and these red.” The present writer then made it a point to watch the White Ash in the neighborhood of Boston and, although the majority of trees bear green or greenish-yellow fruit, occasional colonies were found having the fruit a beautiful purple, which renders the trees conspicuously different in aspect from the ordinary greenish-fruited form. The purple-fruited form seems not to have been distinguished but it is so pronouncedly different in aspect that it deserves the designation:

FRAXINUS AMERICANA L., forma **iodocarpa**, n. f., fructibus purpureis.
— MAINE: Gardiner, June 13, 1911 (*Jennie M. H. Morrell*). MASSACHUSETTS: Winchester, June 17, 1911 (*F. F. Forbes and M. L. Fernald*).
— M. L. FERNALD, Gray Herbarium.

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